

Application No. 09/382,433

AMENDMENTS TO THE CLAIMS

A detailed listing of all claims that are, or were, in the present application, irrespective of whether the claim(s) remains under examination in the application are presented below. The claims are presented in ascending order and each includes one status identifier. Those claims not cancelled or withdrawn but amended by the current amendment utilize the following notations for amendment: 1. deleted matter is shown by strikethrough for six or more characters and double brackets for five or less characters; and 2. added matter is shown by underlining.

1-23. (Canceled)

24. (Previously Presented) A method of performing coordination exercises for neuromotor training, the method comprising:

flexing a first joint of a patient such that a cursor on a display moves to reach a target position on the display at a selected, predetermined time, the motion of the cursor being correlated with the motion or strain of the joint by way of a sensor in an ambulatory orthosis placed at the joint, the ambulatory orthosis comprising a portable controller and a support portion that fits around the joint such that the ambulatory orthosis is carried by the patient during the flexing step, the controller comprising a digital microprocessor.

25. (Original) The method of claim 24 wherein the orthosis comprises:

a first support portion that fits around a first body portion on a first side of the joint;

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a second support portion that fits around a second body portion, the second body portion being on the opposite side of the joint from the first body portion;

a flexible connection connecting the first support portion and the second support portion;

a position sensor operably connected to the flexible connection such that the position sensor detects the relative orientation of the first support portions with respect to the second support portion.

26. (Canceled)

27. (Original) The method of claim 24 wherein the cursor motion is correlated with the strain of a joint by way of a strain sensor.

28. (Original) The method of claim 24 wherein the cursor moves in two dimensions with the motion in one dimension corresponding to output of a position sensor and motion in the other dimension corresponding to output of a strain sensor.

29. (Original) The method of claim 24 further comprising flexing a second joint to simultaneously vary the display along with motion of the first joint, wherein variations in the display due to motion of the second joint is determined by the output of a position or strain sensor at the second joint.

30. (Original) The method of claim 29 wherein the sensors are operably connected to a portable controller comprising a digital microprocessor, the digital microprocessor providing a target for the flexing of the first and second joint on the display.

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31. (Original) The method of claim 24 wherein the sensor is selected from the group consisting of a strain sensor and a position sensor.

32-49. (Canceled)

50. (Currently Amended) An ambulatory orthosis system comprising:

a display,

a support portion that fits around a joint and is carried by the patient during activities and a sensor on the support portion, and

a portable controller comprising a digital microprocessor, the controller being operably connected to the sensor, wherein the controller controls the display based on signals from the sensor, and

wherein the patient, flexing the joint, causes a cursor movement on the display, in which the motion of the cursor is correlated with motion or strain of the joint as detected by the sensor in the support portion when the support portion is associated with the joint of the patient.

51. (Canceled)

52. (Previously Presented) The ambulatory orthosis system of claim 51 wherein the display is integral with the portable controller.

53. (Previously Presented) The ambulatory orthosis system of claim 50 wherein the display is part of a television.

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54. (Previously Presented) The ambulatory orthosis of claim 50 wherein the support portion has an appropriate structure to fit around a patient's knee.

55. (Previously Presented) The ambulatory orthosis of claim 50 wherein the support portion has an appropriate structure to fit around a patient's elbow.

56. (Previously Presented) The ambulatory orthosis of claim 50 wherein the display provides a target to be reached by the patient through their movement of the joint.

57. (Previously Presented) The ambulatory orthosis of claim 50 wherein the sensor comprises a strain sensor.

58. (Previously Presented) The ambulatory orthosis of claim 50 wherein the sensor comprises a position sensor connected to a hinge.

59. (Previously Presented) The ambulatory orthosis of claim 50 wherein the orthosis comprises a hinge.

60. (New) An ambulatory orthosis system comprising:

a display,

a support portion that fits around a joint and is carried by the patient during activities and a sensor on the support portion, wherein the support portion comprises a hinge, and

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a portable controller comprising a digital microprocessor, the controller being operably connected to the sensor, wherein the controller controls the display based on signals from the sensor, and

wherein the patient, flexing the joint, causes a cursor movement on the display, in which the motion of the cursor is correlated with motion or strain of the joint as detected by the sensor in the support portion when the support portion is associated with the joint of the patient.